



### UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	DAVID W. BROWN	)
Serial No.:	10/039,147	) Attorneys' Ref. P214021 )
Filing Date:	01/04/2002	) Art Unit: 2153 )
Title:	SYSTEMS AND METHODS FOR TRANSMITTING MOTION CONTROL DATA	) ) )

#### SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

In accordance with 37 CFR §1.56, the Applicant respectfully submits this Supplemental Information Disclosure Statement to call to the attention of the Examiner the references listed on the attached Forms PTO/SB/08A and PTO/SB/08B for consideration in the prosecution of the above-referenced application for U.S. patent. Copies of the foreign and non-patent references are attached hereto for the Examiner's convenience.

In accordance with 37 CFR 1.97(e), no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the statement after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the statement.

Citation of a reference in this Information Disclosure Statement is not an admission that the reference is prior art to the present invention.

It is believed that no fee is due at this time to maintain the application in full force and effect, however if any such fee is due please charge this to Deposit Account No. 502099.

#### **REMARKS**

- U.S. Patent No. 6,662,361 to Jackson discloses a system for transforming an instruction in a first bit architecture to an instruction in a second bit architecture. The system comprises a transform table that indicates whether or not to transform the particular instruction.
- U.S. Patent No. 4,815,011 to Mizuno et al. discloses a robot control apparatus having a user interface that limits user access to predefined words to limit syntax errors while programming in a machine language.
- U.S. Patent No. 4,688,195 to Thompson et al. discloses a natural language based system for facilitating the design of computer interfaces. The user is provided with a menu of words that can legally follow commands in the context of a particular database system.
- U.S. Patent No. 4,782,444 to Munshi et al. discloses a method of allocating and optimizing registered assignments during the compiling of source into executable code. Local register allocation and assignments are generated by performing a "two-colored pebble game" heuristic.
- U.S. Patent No. 4,912,650 to Tanaka et al. discloses a system for controlling operation of a robot offline. In situations where input of a prescribed signal is being awaited, a key is pressed to simulate the generation of this prescribed signal at an appropriate port.
- U.S. Patent No. 5,020,021 to Kaji et al. discloses a system for translating between languages such as Japanese and English.
- U.S. Patent No. 5,175,684 to Chong discloses a system for translating between natural languages such as Japanese and English.
- U.S. Patent No. 5,175,856 to Van Dyke et al. discloses a compilation system for compiling source code into executable object code. An integrated, intermediary representation supports machine independent and machine dependent optimizations of the resulting object code.
- U.S. Patent No. 5,541,838 to Koyama et al. discloses a machine for translating between natural languages such as Japanese and English.

- U.S. Patent No. 6,070,010 to Keenleyside et al. discloses a system for aligning data in stack memory in a data processing system. The stack memory provides temporary storage for storing parameters for a function call.
- U.S. Patent No. 6,090,156 to MacLeod discloses a register allocator for allocating machine registers during compilation of a computer program.
- U.S. Patent No. 6,233,545 to Datig discloses a universal machine translator for natural languages.
- U.S. Patent No. 6,317,871 to Andrews et al. discloses a system used by a computer program translator. The system identifies the false structure of computer programs and maintains textual consistency of each piece of generated code and the resultant code files.
- U.S. Patent No. 6,425,118 to Molloy et al. discloses a system for automatically generating self checking tests of source to source computer language translations.
- U.S. Patent No. 6,463,404 to Appleby discloses a system for translating between natural languages.
- U.S. Patent No. 6,523,171 to Dupuy et al. discloses a method of translating source programs. A parser performs a semantic analysis of the source code based on known patterns. The subsequent translation is based on information obtained from the patterns.
- U.S. Patent No. 6,658,627 to Gallup et al. discloses a system for controlling the generation of text in one natural language to facilitate the translation of the text into other natural languages.
- U.S. Patent No. 6,665,688 to Callahan et al. discloses a replay method and system for monitoring the generation of a data set from input data sets. When the data set is subsequently accessed, the data is automatically regenerated if out of date.
- U.S. Patent No. 6,778,949 to Duan et al. discloses a natural language translation system.
- U.S. Patent No. 4,199,814 to Rapp et al. discloses a system for allowing the building or changing of a program stored on a machine tool.
- U.S. Patent No. 5,005,135 to Morser et al. discloses a system for correcting path radius errors in a motion control system.

- U.S. Patent No. 5,511,147 to Abdel-Malek discloses a graphical interface for robot control programs.
- U.S. Patent No. 6,528,963 to Hong discloses a machine level system for controlling the speed of a motor of a motion control device to allow an arm part to have an acceleration profile in uniform speed.

Japanese Patent No. JP 08161335 A to Fukumochi appears to disclose a natural language translation system.

Japanese Patent No. JP 2000020114 A to OBA et al. appears to disclose a method of controlling a motion system in which machine control language is converted to sequence control language and loaded onto a motion controller.

- U.S. Pub. No. 2001/0029443 A1 to Miyahira discloses a natural language translation system.
- U.S. Pub. No. 2001/0037492 A1 to Holzmann discloses a system for verifying that a software system satisfies a property. Source strings generated from the code are translated subject to an abstraction filter or conversion table. Logic model checkings are performed on the abstracted verification model.
- U.S. Pub. No. 2002/0165708 A1 to Kumhyr discloses a system for translating natural languages.
- U.S. Pub. No. 2003/0033150 A1 to Balan et al. discloses a computer control virtual environment system.
- U.S. Pub. No. 2003/00161023 A1 to Menezes et al. discloses a system for translating between natural languages.
- U.S. Pub. No. 2004/0025150 A1 to Heishi et al. discloses a compiler for converting a source program to a machine language program. The compiler generates intermediate codes, substitutes the intermediate codes with machine language instructions, and optimizes targeting of the intermediate codes.

Microsoft Corporation's <u>Windows 3.1. SDK Guide to Programming</u>, Chapter 2, "Dynamic Data Exchange" discloses Microsoft's Dynamic Data Exchange (DDE) method of transferring data between applications. The DDE protocol simplifies data exchange between applications.

Microsoft Corporation's <u>Win32 SDK: Prog. Ref. Vol. 2</u>, Chapter 77, "Dynamic Data Exchange Management Library" describes an application programming interface, commonly referred to as DDEML, that may be implemented by an application to allow interprocess communications using Microsoft's Dynamic Data Exchange Protocol.

Microsoft Corporation's <u>Windows for Workgroups 3.1 Resource Kit</u>, Chapter 11, "Network Dynamic Data Exchange" describes the implementation of Microsoft's DDE protocol over a network.

#### CONCLUSION

The Applicant respectfully submits that these references, taken alone or in combination, neither anticipate nor render obvious the present invention. Consideration of the foregoing in relation to the pending application is respectfully requested. If there is any matter which could be expedited by consultation with the Applicant's attorney, such would be welcome. The Applicant's attorney can normally be reached at the telephone number below.

Signed at Bellingham, County of Whatcom, State of Washington, this 16<sup>th</sup> day of March, 2005.

Respectfully submitted,

David W. Brown

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Tel: (360) 647-0400 Fax: (360) 647-0412 CERTIFICATE OF MAILING 37 C.F.R. §1.8

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with the United States Postal Service as first class mail in an envelope addressed to Commissioner for Patents, U.S./Patent & Trademark Office, P.O. Box 1450, Alexandria, VA/ 22313-1450, on the date shown below.

Signature:

Print Name: Robin Fry

Date: March 16, 2005

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Complete if Known Application Number 10/039.147 01/04/2002 Filing Date First Named Inventor David W. Brown Group Art Unit 2153 G. Burgess **Examiner Name** 

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P214021 Attorney Docket Number

			U.S. PATENT		
Examiner Initials*	Cite No. <sup>2</sup>	U.S. Patent Docume Number Kind Code <sup>2</sup>	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		6,662,361	Jackson, Andrea Ontko	12-2003	
		4,815,011	Mizuno et al.	03-1989	
		4,688,195	Thompson et al.	08-1987	
		4,782,444	Munshi et al.	11-1988	
		4,912,650	Tanaka et al.	03-1990	
		5,020,021	Kaji et al.	05-1991	
		5,175,684	Chong, Leighton K.	12-1992	
		5,175,856	Van Dyke et al.	12-1992	
		5,541,838	Koyama et al.	05-2000	
		6,070,010	Keenleyside et al.	05-2000	
		6,090,156	MacLeod, Andrew W.	07-2000	
		6,233,545	Datig, William E.	05-2001	
		6,317,871	Andrews et al.	11-2001	
		6,425,118	Molloy et al.	07-2002	
		6,463,404	Appleby, Stephen C	10-2002	
		6,523,171	Dupuy et al.	02-2003	
		6,658,627	Gallup et al.	12-2003	
		6,665,688	Callahan et al.	12-2003	
		6,778,949	Duan et al.	08-2004	
		4,199,814	Rapp et al.	04-1980	

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Examiner Initials*	Cite No.1		Office <sup>3</sup>	Foreign Patent Docu Number	ment Kind Code (if known)	Name of Patent Applicant of Cited D		Pages, Columns, Lines, Where Relevant Passages or Relevant Figures	Т <sup>6</sup>
			JP 8161335A		Fukumochi, Yo	ouji 06-1996			
			JP200002011	4A	OBA et al.	01-2000			
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<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number 2 See attached Kinds of U.S. Patent Documents 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3) 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document s Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible & Applicant is to place a check mark here if English language Translation is attached.

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## INFORMATION DE STATEMENT BY APP

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Application Number	10/039,147			
Filing Date	01/04/2002			
First Named Inventor	David W. Brown			
Group Art Unit	2153			
Examiner Name	G. Burgess			
Attorney Docket Number	P214021			

			U.S. PATENT		
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		5,005,135	Morser et al.	04-1991	
		5,511,147	Abdel-Malek, Karim	04-1996	
		6,528,963	Hong, Yong-joon	03-2003	
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				FORE	IGN PATENT			
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Initials*	No.1	Office <sup>3</sup>	Number	Kind Code <sup>5</sup> (if known)	Applicant of Cited Document	Cited Document MM-DD-YYYY	Passages or Relevant Figures	T⁵
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# INFORMATION DESCLOSURE STATEMENT BY AFFEMENT

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First Named Inventor David W. Brown

Group Art Unit 2153

Examiner Name G. Burgess

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Sheet 1 of 1

Attorney Docket Number P214021

		OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	
		U.S. Pub. No 2001/0029443 A1 to Miyahira	
		U.S. Pub. No. 2001/0037492 A1 to Holzmann	
·		U.S. Pub. No. 2002/0165708 A1 to Kumhyr	+
		U.S. Pub. No. 2003/0033150 A1 to Balan et al.	
		U.S. Pub. No. 2003/0061023 A1 to Menezes et al.	
		U.S. Pub. No. 2004/0025150 A1 to Heishi et al.	
		MICROSOFT CORPORATION; "Dynamic Data Exchange"; Windows 3.1 SDK Guide to Programming; 1992, 1993; Chapter 22; 21 pages.	
		MICROSOFT CORPORATION; "Dynamic Data Exchange Management Library"; Win32 SDK: Prog. Ref. Vol. 2; 1992, 1993; Chapter 77; 26 pages.	
		MICROSOFT CORPORATION; "Network Dynamic Data Exchange"; Windows for Workgroups 3.1 Resource Kit; 1992, 1993; Chapter 11; 19 pages.	
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